

Claim 1 (Currently Amended)      A procedure for the cold processing of tubular metal elements or other elements with dead or through holes, nuts, comprising the following machining steps:

- (a)    preparing a blank of full metal material from rolls;
- (b)    straightening the full metal material after unrolling from the skein;
- (c)    cutting the metal material into pieces of a determined length;
- (d)    passing each piece sequentially through a plurality of work stations of a work centre comprising several cold hydraulic presses, ~~wherein operation of the hydraulic presses is controlled to limit the temperature of the work pieces to less than 700 degrees during processing~~ in order to obtain a blank element presenting one or two longitudinally opposite dead holes separated by a central transverse section, wherein each piece is first cold machined by a hydraulic press, then extracted from said hydraulic press by means of a suitable manipulator robot and conveyed to an adjacent hydraulic press for a subsequent cold machining operation;

and

- (e)    through drilling ~~of~~ the blank to remove the central traverse section;

wherein the metal elements have a diameter greater than 30 mm.

Claim 2 (Currently Amended)      A procedure for the cold processing of metal elements, comprising the following machining steps:

- (a)    preparing a blank of full metal material in the form of bars, which bars are loaded in bundles in a bar sectioning plant;

(b) — ~~straightening the full metal material;~~

(e)(b) cutting the metal ~~material~~ bars into pieces of a determined length after being presented from the bar sectioning plant; and

~~(d)(c)~~ passing each piece sequentially through a plurality of work station of a cold multi-hydraulic-press plant, ~~wherein operation of the hydraulic presses is controlled to limit the temperature of the work pieces to less than 700 degrees during processing~~ in order to obtain a finished element with or without swarf or waste, wherein each piece if first cold machined by a hydraulic press, then extracted from said hydraulic press by means of a suitable manipulator robot and conveyed to an adjacent hydraulic press for a subsequent cold machining operation; wherein the metal elements have a diameter greater than 30 mm.

Claim 3 (Currently Amended)      A procedure for the cold processing of tubular metal elements or other elements with dead or through holes, nuts, comprising the following machining steps:

(a) preparing a blank of full metal material from rolls, wherein setting up and preparation of the full blank differs according to the metal material used;

(b) straightening the full metal material after the material is unrolled from the skein;

(c) cutting the metal material into pieces of a determined length;

(d) passing each piece sequentially through a plurality of work stations of a work centre comprising several cold hydraulic presses, ~~wherein operation of the hydraulic presses is controlled to limit the temperature of the work pieces to less than 700 degrees during processing~~ in order to obtain a blank element presenting one or two longitudinally opposite dead holes

separated by a central transverse section, whereby each piece is first cold machined by a hydraulic press, then extracted from said hydraulic press by means of a suitable manipulator robot and conveyed to an adjacent hydraulic press for subsequent cold machining operation; and

(e) through drilling of the blank to remove the central transverse section;

wherein the metal elements have a diameter greater than 30 mm.

Claim 7 (Currently Amended) The procedure according to claim 2, ~~carried out on starting material in the form of rolls, in which~~ wherein previously washed metal material is straightened by loading it on a wire-straightening unit designed to unroll the skein.

Claim 8 (Currently Amended) The procedure according to claim 2, ~~carried out on starting material in the form of bars, in which these bars are loaded in bundles in a bar section plant and in which~~ wherein the bars are presented at the cutting station in a synchronized way according to the needs of a machining centre consisting of the presses.

Claim 16 (Currently Amended) A plant for the implementation of a procedure for the cold processing of tubular metal elements or other elements with dead or through holes, nuts, comprising the following machining steps:

- (a) preparing a blank of full metal material from rolls;
- (b) straightening the full metal material the material is unrolled from the skein;
- (c) cutting ~~[[of]]~~ the metal material into pieces of a determined length;

(d) passing the pieces sequentially through a plurality of work stations of a work centre comprising several presses in order to obtain a blank element presenting one of two longitudinally opposite dead holes separated by a central transverse section; and

(e) through drilling of the blank by removal of this central traverse section;

wherein the metal elements having a diameter greater than 30 mm,

wherein the plant comprises a series of cold hydraulic presses adjacent to each other, designed to carry out a successive series of pressing operation on pieces to be machined wherein each piece is first cold machined by a hydraulic press, ~~wherein operation of the hydraulic presses is controlled to limit the temperature of the work pieces to less than 700 degrees during processing~~, then extracted from said hydraulic press by means of a suitable manipulator robot and conveyed to an adjacent hydraulic press for a subsequent cold machining operation.

Claim 20 (Currently Amended) A procedure for the cold processing of metal elements, comprising the following machining steps:

(a) preparing a blank of full metal material in the form of bars, which bars are loaded in bundles in a bar sectioning plant, in which the setting up and preparation of the full blank differs according to the metal material used;

~~(b) straightening the full metal material;~~

~~(e)(b)~~ cutting of the metal ~~material~~ bars into pieces of a determined length; and

~~(d)(c)~~ passing each piece sequentially through a plurality of work station of a cold multi-hydraulic-press plant, ~~wherein operation of the hydraulic presses is controlled to limit the temperature of the work pieces to less than 700 degrees during processing~~ in order to obtain a

finished element with or without swarf or waste, wherein each piece is first cold machined by a hydraulic press, then extracted from said hydraulic press by means of a suitable manipulator robot and conveyed to an adjacent hydraulic press for a subsequent cold machining operation; wherein the metal elements have a diameter greater than 30 mm.

Claim 28 (Currently Amended) A plant for the implementation of a procedure for the cold processing of metal elements comprising the following machining steps:

(a) preparing a blank of full metal material in the form of bars, which bars are loaded in bundles in a bar sectioning plant;

~~(b) — straightening the full metal material;~~

~~(e)(b)~~ cutting of the metal ~~material~~ bars into pieces of a determined length; and

~~(d)(c)~~ passing the pieces sequentially through a plurality of work station of a multi-hydraulic-press plant in order to obtain a finished element with or without swarf or waste;

wherein the metal elements have a diameter greater than 30 mm,

wherein the plant comprises a series of cold hydraulic presses adjacent to each other; ~~wherein operation of the hydraulic presses is controlled to limit the temperature of the work pieces to less than 700 degrees during processing,~~ designed to carry out a successive series of cold pressing operations on pieces to be machined wherein each piece is first cold machined by a hydraulic press, then extracted from said hydraulic press by means of a suitable manipulator robot and conveyed to an adjacent hydraulic press for a subsequent cold machining operation.